



THOMAS G. NEWMAN,
EDITOR.

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The Illinois State Fair will be held at Chicago, Sept. 6-10, 1886. The Premium List can be obtained of Chas. F. Mills, the Secretary, at Springfield, Ill., or at this office. The premiums on bees and honey amount to \$30 and a diploma. The Editor of the BEE JOURNAL has been appointed to award the prizes in that department. We hope that there will be a good display—a thing unknown for many years past.

The Guide Book for Bee-Keepers, by Mr. Thos. W. Cowan, F. G. S., F. R. M. S., etc., editor of the *British Bee Journal*, has been translated into the French language, by Mr. Ed. Bertrand, of Nyon, Switzerland. We have received a copy, with the compliments of the author, and also the translator. It is a book of 180 pages, nicely printed and illustrated. It will greatly help French-speaking bee-keepers, as it is fully up with the times.

Monsieur Hamet, editor of the *Apiculteur*, whose serious illness was recently mentioned in our columns, was so far recovered a little while ago, that he had decided to resume his classes at his practical school in the Luxemburg Gardens. On his way thither, however, and while still near his residence, he was run over by a carriage, a wheel of which passed over his left leg, without, however, breaking any bones. He had to be taken home in a cab and compelled to keep quiet for about eighteen days. He has now been able, although with evident difficulty, to resume his school duties, and there is every hope of an early recovery.—*British Bee Journal*.

The American Apiculturist has again changed hands, this time Mr. Henry Alley is the possessor. The August number was out on time, and is full of excellent matter. As Mr. Alley has been editor of it for months, practically there is no change. The AMERICAN BEE JOURNAL wishes it success, as it does every periodical that harmoniously works for the good of the pursuit.

Join the Bee-Keepers' Union.—The Bee-Keepers' Magazine for August contains the full "Report of the General Manager," and also the following editorial remarks concerning it:

In another column will be found the report of the General Manager of the Bee-Keepers' Union. We commend it as a good, sound document, showing Thomas G. Newman, Esq., to be a person eminently fit to hold the position he does. Join the Union.

Messrs. Aspinwall & Treadwell, the editors of the Magazine, are each members of the Union, and have given it their very cordial endorsement. The only thing that causes us surprise is the fact that the Union has not now at least five or six thousand members. It is to the interest of every bee-keeper to do as the Magazine suggests, viz: "Join the Union." It is no personal advantage to the Manager; the energies he has devoted to the Union have been purely gratuitous, and have been cheerfully rendered for the welfare of the pursuit.

Now, reader, a word to you. From ten to twenty thousand bee-keepers will read this, and every one of you ought to become members at once. It is to your interest to do so. It is your duty to do so! How many of you will send on \$1.25 for yearly dues and one assessment for the defense fund? Let us see!

Several have written to us for names and addresses of good, responsible commission houses that handle honey. We must, however, be excused from doing so, for this reason: About seven years ago a bee-keeper made a similar request, and we referred him to a commission firm, the senior member of which we had known for many years. We stated this fact, and said we believed him to be honest and reliable. The honey was shipped to that firm, and just at that time the senior member was taken sick, and for months could not leave his residence. Meanwhile the other members of the firm became disgusted, sold out the goods on hand (including the honey), and left for parts unknown.

Our correspondent claimed that he should not have shipped the honey to that house but for our endorsement, and as he could get no returns from the house, he should look to us for the pay—that we were morally, and perhaps legally responsible for it.

After considerable correspondence, and thinking that the commission-man would soon arrange matters and start in business again, we paid for the honey. But though seven years have elapsed, not a cent of it have we ever received—the commission-man claiming that he was ruined by the stealing of his partner while he was sick.

Therefore, excuse us! And at the same time take our advice, and do not ship the honey at all. Create a home market for it. It will bring nearly double the prices now ruling in the large commercial centres. You will save the freight charges and breakages, and it will be better for many other reasons. Sell it at home.

Bees have for some time held undisputed possession of the Christian church at Harmony, Ills. The citizens gathered on Wednesday, Aug. 4, 1886, and tore off the siding from the foundation to the roof, disclosing a mass of honey 16 feet in height.

Still Another Lawsuit.—Mr. C. C. Richardson, of Tipton, Ind., has been sued for maintaining an apiary on his land, which is declared by the complainant to be a nuisance. Mr. Richardson gives the following information concerning it:

I find myself involved in an action for maintaining a public nuisance on account of my bees. The facts in the case are these: For the last two seasons I have kept my bees on an adjoining lot to the complaining witness. Last season my apiary consisted of some 40 colonies; this season some 60 odd. However, I have built up my apiary in the same block they occupy now. A public street continually traveled is on the west, and an alley on the south, much used. I have had no complaint from teamsters, passers-by, or the neighborhood, except by the complainant. But on the contrary my apiary is much admired by the public, and passers by frequently stop to watch me manipulate the bees.

The lot that I occupy has no shade trees or shrubs on which the bees can cluster, while the complainant's lot has many trees on which the bees will cluster when they go in that direction; otherwise they cluster on the shade trees along the street. Last season the complainant objected to the bees clustering on his trees, claiming that it would injure them, though I removed them very carefully. I tried the sweetening process; it worked charmingly, so much so that at the close of the season he came to the conclusion that he must have a colony, provided he could spare the money to pay for them. This season, however, war was inaugurated long before the time for the sweetening process to commence.

Since then we have heard nothing but exclamations about "horrid bees" from that quarter, and an effort on their part to stir up the neighborhood against my bees. About the middle of June the complainant gave me orders to move the bees, or he would prosecute me. I could not move them then, and do not feel disposed to do so now, unless there was a general complaint.

I should have stated that a number of parties are keeping bees in our town; one apiarist, with his bees, being located within half a square of the complaining witness.

My house is surrounded on three sides with bees. We keep our doors and windows open continually during the hot weather. The bees do not bother us, and I cannot believe that they bother the complainant only as stated above. Bees have always been kept in our thriving little city, during my residence of 21 years, though without success as apiarists. As far as I know, I am the only successful bee-keeper in the county. I am proud to say that I have made a success the last five years in the bee-business, though I have not resorted to selling either bees or supplies.

In connection with my bees I follow sprouting plants for the trade and gardening. During the season for bees to fly there is almost a continual string of callers for plants and honey. At least two thousand callers during the season for the last five years, I think would be a low estimate, and but one has been stung out of that number.

Mr. Richardson desired to know what the Union would do to help him to defend the suit, as he was one of the first to join the Union. The Manager has made arrangements to have a good attorney defend the suit, and hopes to prevent malice from gaining a victory over right and old age.

When Marketing Extracted Honey,

it is a sad blunder to use barrels holding from 300 to 500 pounds—they are too large to be desirable for the trade, too bulky to be handled with care in transportation, and too dear to be lucrative to the producer, for honey put up in such large barrels is subject to a discount of one cent per pound, because of the difficulty in disposing of it without repacking and dividing into smaller lots.



AND

Replies by Prominent Apiarists.

[It is useless to ask for answers to Queries in this Department in less time than one month. They have to wait their turn, be put in type, and sent in about a dozen at a time to each of those who answer them; get them returned, and then find space for them in the JOURNAL. If you are in a "hurry" for replies, do not ask for them to be inserted here.—Ed.]

Swarms Returning.

Query, No. 289.—What causes a swarm of bees to return to the old hive after being hived?—J. L. P.

Probably the old queen did not go out with them.—A. J. COOK.

"Dissatisfaction" in many cases. Sometimes they do not get the queen with them.—H. D. CUTTING.

Perhaps the queen did not go with them.—C. C. MILLER.

If the queen was not with them they would return.—W. Z. HUTCHINSON.

Usually it is the queen that is missing.—DADANT & SON.

Usually failure of the queen to go with the swarm, or to stay with it, if she did go.—JAMES HEDDON.

They have no queen with them, or else she is balled by a few strange bees, so the bees fail to realize that their queen is there.—G. M. DOOLITTLE.

The queen either failed to go with the swarm, or was lost. There may be a few exceptions to this rule, but it is correct in ninety-nine cases in a hundred.—J. P. H. BROWN.

The only cause I know, is that the queen did not accompany the swarm, or else was lost in hiving it.—J. E. POND, JR.

The queen may be killed in the operation of hiving; she may be unable to fly, as is often the case, and be lost; or she may not come out of the hive at all. In either of which cases the swarm will return to the old hive.—G. L. TINKER.

The most common cause is that they miss their queen and return home because that is the best they can do. I have known a queen to be unable to go with the swarm on two or three occasions, and then succeed at last. A neighbor of mine hived a swarm three or four times this season before the queen succeeded in going with the swarm. If swarming is delayed until the young queens begin to hatch, one or more of them may go with the first swarm, and a swarm with more than one queen may do almost anything.—G. W. DEMAREE.

Destroying Drones and Drone-Brood.

Query, No. 290.—I have a strong colony of Italian bees at work in the surplus boxes that, a few days ago, killed off all the drones in the hive and carried them out, and are now carrying out the drone-brood. The white clover season has just commenced, and is growing better every day. What was the probable cause?—Manchester, N. H.

The cause was undoubtedly lack of nectar in the flowers.—H. R. BOARDMAN.

They propose to run for honey. Such are just the bees to breed from.—A. J. COOK.

I do not know, unless there was a dearth of honey-yielding.—JAMES HEDDON.

They may have given up the idea of swarming.—W. Z. HUTCHINSON.

Probably just at that time the clover yielded little or no honey, although you thought that it was.—G. M. DOOLITTLE.

The cause was a honey-dearth at the time it was done.—DADANT & SON.

It was caused either by a dearth of honey or the bees abandoned for the present the idea of swarming.—J. P. H. BROWN.

Very little honey coming in was the cause. I have seen in this locality the ground covered with white clover and not a drop of honey from it. I then commenced feeding and they stopped killing drones.—H. D. CUTTING.

A few days of unfavorable weather or temporary failure of nectar secretion will often cause bees to fear the worst and destroy the drones and drag or drive out those just hatched. Rarely they carry out the immature larvae upon a complete failure of the flowers.—G. L. TINKER.

"Bees do nothing invariably." The honey season might have commenced just after they killed the drones, but the carrying out of drone-brood while gathering honey freely, is one of those unaccountable things that no one can tell anything about.—J. E. POND, JR.

The probable cause is that there was a dearth of nectar just before white clover bloomed, and the bees were discouraged and commenced to banish their drones; and having commenced the persecution they did not know when to quit. If you remove the queen when a colony is persecuting their drones the bees will keep it up for several days before they seem to realize their condition.—G. W. DEMAREE.

Sometimes bees kill off all drones as soon as a newly-reared queen gets to laying. It would be nothing strange if your bees had superseded their old queen just before clover bloom.—C. C. MILLER.

Fastening Combs to Separators.

Query, No. 291.—Why do my bees fasten combs to tin separators, more so this year than usual? What must I do to prevent them from so doing? I use 2-inch sections and comb foundation.—F., Mich.

Use clean tin. If the tin is old, rub over the surface lard or butter.—H. D. CUTTING.

A few of my colonies used to do this, but a change of queens has apparently stopped it.—G. M. DOOLITTLE.

Our bees do so very little this year. Is it not because you gave them so little room that they were much crowded.—A. J. COOK.

Use sections not more than 1½ inches wide. I get nice sections of honey without separators, but I use a section-case only one tier deep, and sections not wider than 1½ inches. Improved section-cases will banish separators.—G. W. DEMAREE.

In my experience I find bees more prone to stick the combs when 2-inch sections are used than when sections approach nearer the natural distance of near 1½ inches from septum to septum. I much prefer sections of 1½ or 1¾ inches in width, to 2 inches in width.—J. P. H. BROWN.

A weak colony or one working slowly will fill one side faster than the other, thus pushing the bottom of the foundation to one side. Level your hives from side to side, have strong colonies, and then hope for a rapid flow.—C. C. MILLER.

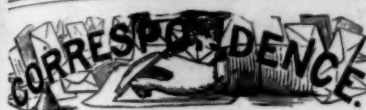
In a good honey-flow, if bees have insufficient room to store surplus, or the cases of wide sections are not tiered up soon enough, the bees are apt to build brace-combs to separators. If honey is coming in rapidly the cases of sections should be tiered up as soon as a good start is made in them. This course will not only prevent largely the building of brace-combs between the cases, but the evil complained of.—G. L. TINKER.

Home Market for Honey.










To create Honey Markets in every village, town and city, wide-awake honey producers should get the Leaflets "Why Eat Honey" (only 50 cents per 100), or else the pamphlets on "Honey as Food and Medicine," and scatter them plentifully, and the result will be a DEMAND for all of their crops at remunerative prices. "Honey as Food and Medicine" are sold at the following prices:

Single copy, 5 cts.; per doz., 40 cts.; per hundred, \$2.50. Five hundred will be sent postpaid for \$10.00; or 1,000 for \$15.00. On orders of 100 or more, we will print, if desired, on the cover-page, "Presented by," etc. (giving the name and address of the beekeeper who scatters them).

To give away a copy of "Honey as Food and Medicine" to every one who buys a package of honey, will sell almost any quantity of it.



Explanatory.—The figures BEFORE the names indicate the number of years that the person has kept bees. Those AFTER, show the number of colonies the writer had in the previous spring and fall, or fall and spring, as the time of the year may require.

This mark  indicates that the apiarist is located near the center of the State named;  north of the center;  south;  east;  west; and this  northeast;  northwest;  southeast; and  southwest of the center of the State mentioned.

For the American Bee Journal.

Experience and Experiment.

G. W. DEMAREE.

The honey crop will be short again this year in Kentucky, and perhaps in all the Middle States as a general thing. Our bees in this State came through the winter in a weakened condition; never were my colonies so weak in the spring as they were early last spring. But favorable weather brought them forward rapidly, and swarming commenced as early as usual. The honey season was really good until about half way through the usual period of time in which black locust and white clover yield nectar in quantity to furnish surplus, and then unfavorable weather set in with prevailing north and east winds, and the honey-flow was at an end.

Early in July we had a few mornings that gave our bees a lively time gathering the so-called honey-dew, the first thing of the kind that I have observed for several years. The insects producing this sweet liquid substance were not the ordinary scale or bark-lice which produce the black, filthy stuff, so appropriately called "bug-juice" by a number of writers in the bee-papers, but is a lively little insect of a pale yellow color, has six well-formed legs, large compound eyes, between which are located the long, slender antennae that are nearly always in motion. A beautiful pair of gauze-like wings extending beyond the extremity of the abdomen completes the external appearance of this strange little honey aphid. They are so very small that it requires a glass of considerable power to exhibit the insect to good advantage. Frequently while I had a specimen under a Codding lens it would spread its gauzy wings and fly away, or walk gracefully out of the range of the glass.

I saw them nowhere but on the leaves of the black walnut. They were found on the under side of the leaves, while the tops of the leaves, many of them, had a glazed, shiny appearance to the unaided eye, but when put under the glass they presented the appearance of being sprayed with a transparent liquid as clear as water, and sweet to the touch of the tongue.

While the dew was on in the morning, the bees would hurry over the leaves licking up this dew-like substance with the greatest eagerness. I should have no fear of this aphid honey injuring my bees, though it was ever so abundant.

I have discovered some things this season that I do not remember of seeing in print or of hearing them mentioned by any one. One of which is the fact that young queens sometimes, perhaps 3 per cent. of them, have their heads turned the wrong way in the cells, and being unable to cut through the base of the cells they perish in the cells. In case of retarded hatching I discovered by opening a cell that a well-formed and perfectly-developed queen was in this predicament. I rescued her from her entombment and set her at liberty. This circumstance led me to making close observations, and I have since found two more queens reversed in the cells.

THE SUN WAX-EXTRACTOR.

This is the third season that I have operated a sun, or solar wax-extractor, and when properly made I know of no device that will do its work so cheaply and so well as the sun wax-extractor. Of all the methods that I have tried the sun wax-extractor is the only device that will separate the wax cleanly from old, and pollen-filled combs, scrapings, etc. It would surprise any one to see how much honey can be extracted from the cappings after they have been well drained in the uncapping-can, by subjecting them to the heat of the sun in the sun wax-extractor.

To make the device work well the pan that holds the combs, cappings, etc., must be made in the form of a half-cylinder, with the back end closed while the front or drip end is left open. This circular shape of the pan or bottom of the extractor permits the wax to drain from the refuse of the combs much more readily and cleanly than can be the case when a flat pan with elevated rim is used.

A sash that will just take three panes of glass 12x20 inches will furnish heat sufficient to render all the wax that is ordinarily produced in an apiary of 100 colonies. The glass should have nothing between them to cast a shadow; just let the edges of the glasses fit close together. The sash to my sun wax-extractor is made of $\frac{3}{4}$ x2 inch stuff, so made as to stand on the frame-work like a shallow box 2 inches deep. It has a shallow rabbet at the top to receive the glass, which are secured in place by tin points. The sash is made to slide between guides, so that it can be shoved backwards and forwards. The frame-work is simply a box with four legs like an old-style bee-hive. The proper pitch of the draining pan is obtained by blocking up or letting down the back end of the frame-work.

It would astonish any one who had never tried it, to see how much heat will be generated by this device on a clear, hot day. My apparatus will melt and run down a cake of wax 3 or 4 inches thick in a few hours; and if

robber bees rush in when the sash is slid back for any purpose, a few feeble struggles ends their existence.

I am quite sure that when beekeepers learn how to make and use the sun wax-extractor it will take the place of all other devices for common purposes.

THE TIERED BROOD-CHAMBER.

I have again this season employed a limited number of my shallow extracting-cases for brood-chambers, using two of them, tiering one on the other. My extracting-cases are $5\frac{1}{4}$ inches deep, taking frames $4\frac{1}{2}$ inches. The top and bottom bars of the frame are made to project $\frac{3}{8}$ of an inch beyond the end-bars, and are held in a central position in the case by means of folded strips of tin inserted in saw-cuts $3\text{--}16$ of an inch from the top and bottom of the case, thus leaving a shallow bee-space at the top and bottom of the frames. The strips of tin at the bottom of the case are nailed fast, while the two top strips are movable. This makes the frames movable, and the case reversible.

The idea of a shallow bee-space at the top and bottom of the frames and section-boxes originated with myself, though I notice that this idea is prominent in Mr. J. M. Shuck's patent hive, a sample of which I have in my apiary; but I suppose that Mr. Shuck does not claim this as his property, as it would be impossible to define what a "bee-space" is, in actual measurement.

After trying the double-brood-chamber hive pretty thoroughly, I feel sure that it will never come into general use. Those who wish to manipulate all the honey out of the brood-nest into the surplus department, with the view of feeding cheaper food than honey to their bees for winter stores, and have no qualms of conscience if some of the "cheaper food" does go into the surplus at the beginning of the early honey harvest, will probably hold on to the tiered brood-chamber for some time to come, or until the honey business is well nigh ruined. It costs more to make a hive in two parts. It requires more time and labor to manipulate a double-brood-chamber, for double the number of frames must be handled, if the frames are to be handled at all, and if not, then the movable frame is a useless expense.

There are some serious defects about the double brood-chamber that seems not to have attracted attention at this early stage of its use. If you wish to have queen-cells built, or wish to save the cells after a swarm issues, you will generally find the best cells built from the lower edge of the upper tier of combs and extending down through the bee-space and attached to the top-bars of the lower tier of combs, so that when the two divisions are separated the cells are torn to pieces. The same is true of the worker brood; bees are most likely to build bits of comb between shallow departments, and as the worker brood reared in shallow frames—especially in the lower tier is usually

crowded up to the top-bars, the worker brood is not unfrequently torn and mutilated when separating the divisions of the brood-chamber.

But the greatest objection of all is the certainty of having your apiary in a starving condition at the close of the honey season, and that without enough honey over and above what may be obtained from the single brood-chamber hive to compensate for the heavy loss sustained where feeding back to bees honey that has been taken from them, to say nothing of the delirium of excitement, and consequent wear on the bees at a time when nature designed that they should be quiet.

I believe that a large majority of bee-keepers will agree with me when I say that no greater calamity can overtake the bee-keepers than a starving apiary at any season of the year. It is mighty easy to say "feed them," certainly it is, but feeding must be done at a heavy loss of stores, and at a loss in every way.

Christiansburg, Ky.

Pacific Rural Press.

Arrangement of the Hives.

WM. MUTH-RASMUSSEN.

In laying out the grounds for an apiary, and at the annual addition to the same, it is of considerable importance how the hives are arranged, both in their relative position toward each other and toward the honey-house and other objects on the ground. I will proceed to point out, first, the way in which they should not be placed; second, the different ways in which they may be arranged, both in regard to the safety and comfort of the bees, and also in regard to the convenience of the owner.

Hives should not be placed too near each other, as there is danger of the bees (particularly the younger ones) entering the wrong hive and being killed as intruders; also of the queens making the same mistake when returning from their "wedding trip" or in swarming, when a queen with clipped wing running on the ground and finding herself unable to follow the swarm attempts to re-enter the hive.

Hives should not be placed together on benches, as one hive cannot be examined or manipulated without disturbing all the other hives on the same bench, putting the bees on their guard and making them ready for an attack on the bee-keeper before he opens another hive. Benches also afford a convenient runway for ants, to the great annoyance of the bees as well as their owner. Hives should not be placed near willow hedges, cottonwood or any other trees which harbor ants, nor under evergreen-trees, which give shade when the bees ought to have the full benefit of the sun.

A high knoll exposed to severe wind; uneven ground, interspersed with gullies or boulders; low, damp ground, abounding in grass or weeds, which interfere with the free circulation of air around the hives, and

which harbor toads and other enemies are to be avoided. Close sheds, boarded up on all sides but the front, will make it uncomfortably hot for the bees during summer, and may cause the combs to melt and break down.

Hives should not be placed in close proximity to dwelling houses, stables, line-fences or public highways, as the bees are liable to be disturbed and to become annoying, and often dangerous to people and animals; nor near haystacks, as the fire occasionally employed in the apiary may, through an accident, become the cause of a conflagration. Hives should never be placed close against a building or fence. There should be sufficient room so that the operator can stand at the rear of the hives when he is at work, and thereby avoid annoying the bees by being in their way while they are flying out and in at the entrance.

A clean, sandy plat, free from brush, weeds, bushes, evergreen-trees, boulders and other obstructions, is the best location for any apiary. The ground should have a gentle slope, and the hives face towards the east or southeast, that the morning sun may shine on the entrances, which will induce the bees to fly out earlier in the morning, than if the entrance is shaded. The entrance to all the hives should be in full view from the honey-house, that the owner may see at a glance from which hive a swarm is issuing, or where robbing is going on.

For the safety and convenience of the bees and queens, the hives should be as near the ground as possible, each hive resting on its separate stand, made of boards, or simply of four bricks or of blocks, sawed from the scantling. When a building is erected, there will often be a lot of ends and waste pieces of scantling, which can be sawed into such blocks instead of using them as kindling and fire-wood. Hives should not be placed directly on the ground, as it will rot the bottom-boards and harbor ants, but the earth may be banked up even with the entrance, so that spiders, toads and lizards cannot find a hiding-place underneath.

The hives may be placed in long rows, in hexagonal form or in any other position toward each other, which will make it most convenient for the operator, but should always be so far apart that a wheelbarrow can be run between them in any direction. If shade-trees are planted in the apiary, they should be so placed that they do not interfere with such free passage; they should be kept trimmed up, that the lower branches do not annoy the bee-keeper at his work, and should be thinned out, when necessary, that they do not give too dense a shade. All other trees or bushes, provided for the swarms to settle on, should be on the outer edge of the apiary.

A small, running stream, or a well near the apiary, is indispensable. It will be most convenient to have the apiary located at the rear of the honey-house. If the ground is sloping, and the house below the hives, it will facilitate the carrying of honey

from the hives to the house. The space in front of the honey-house should be left unobstructed, so that a team may be driven up to the front door.

Independence, O. Calif.

For the American Bee Journal.

Space between Brood-Frames.

GEO. F. ROBBINS, (57-95).

I am the author of Query, No. 284, and when I sent it in I was anxious to know about it, so while waiting for the answers to the query, I was testing the matter myself, and long before the answers came, I had arrived at my own conclusion. However, I read the answers with as much interest as if I had not decided the matter myself, and I found in doing so that at least one well known and successful apiarist—Dr. Miller—was not so well satisfied as I myself.

In two cases last spring where I could find combs thin enough I put nine of them in a 12-inch hive, and I did the same thing several times during the summer. I found the plan worked tolerably well, when combs not too thick, and that hung straight, could be found. When our frames are exact and true, if we put in only foundation starters, to have them thus close together is an excellent way to get combs built straight. Nothing is much worse than wide spaces for that. But when we come to manipulate frames so close together we find it difficult, injurious, and oftentimes impossible. There is not sufficient movable space even for very straight combs, and an apiarist of any experience well knows that in numbers of cases, for reasons impossible or inexpedient to help, combs will be built very uneven or to hang crooked in the frame. To be jamming such frames so close together is often very damaging; besides the thinner the comb when capped over the greater the cost of time and material to the bees.

On the other hand, nothing contributes more to make uneven combs than so liberal a space as $1\frac{1}{2}$ inches. Moreover, so much space is not the best economy, for two reasons: First—It is a loss, because so much room is unnecessary. Second—The bees will build out and fill with honey so much more of the upper part of the frame. When the space is narrower they will fill the frames with brood almost or quite to the top-bar, and where we practice top-storing, as the most of us do, that is an important item. Hence I am satisfied that for general purposes $1\frac{1}{4}$ inches is too narrow a space; $1\frac{1}{2}$ inches is too wide. I have varied the spacing of frames considerably this season, and as the result of my experiments I have settled down to the conviction that, all things considered, $1\frac{3}{8}$ inches from centre to centre is about right. In surplus arrangements worked for extracted honey I hardly want less than $1\frac{1}{2}$ inches; wider will do about as well. Also, when we confine bees to

five frames for wintering, I prefer to have them built a little thicker than 1½ inches.
Mechanicsburg, © Ills.

Gravenhorst's Illustrated Bee Journal.

Autobiography of Baron Von Berlepsch.

C. J. H. GRAVENHORST.

August, Baron von Berlepsch, was born at Seebach, near Langensalza in Thuringia, June 28, 1815. Being a precocious boy he made up his mind while still a pupil of the Gymnasium (High School), to study ancient classic philology, but his father objected and compelled him to study jurisprudence. He became reconciled to the science of law at the Universities which he attended, in so far as to study *corpus juris* industriously, and with philosophical exactness. But his father further insisted on his practicing law in the hope of seeing his sons some day become Minister of Justice. The dull routine of work, however, disgusted the young lawyer in a few years, in consequence of which he quitted the law and devoted his time to scientific studies in Munich until the death of his father, which occurred in 1841. From 1841 till 1858 he lived on the family estate of Seebach, occupying himself with bee-keeping, pomology, and his favorite study of classic philology. From 1858 to December, 1866, when he married at the advanced age of fifty-one, he resided at Gotha, and from that time he and his wife had a most happy home at Coburg.

I have the original of the above memoir before me, being in the handwriting of the Baron's well-known consort, Lady Lina von Berlepsch, who is also an authoress on apiculture. The Baron either dictated to his wife this biographical sketch or communicated it to her for the purpose of having it written down. The words interlined in the printed text are additions made by the Baron himself. This memoir dated from the year 1868, when I published an article in the *Gartenlaube* headed "The Leaders of German Bee-Keepers," with the likenesses of Dr. Dzierzon, Von Berlepsch, Kleine and Von Siebold, accompanied by biographical notes. Before compiling this article I applied for particulars to Von Berlepsch, with whom I was in active correspondence at that time.

Baron von Berlepsch took an interest in bees when still a child, and even kept a few colonies when at the University. On his taking possession of the estate of Seebach, it was his intention to give special attention to bee-keeping, for which purpose he established a large apiary there. He first used hives with immovable combs. When at that time Dr. Dzierzon invented hives with movable combs, he watched with the greatest concern this revolution in apiculture, and declared it to be a calamity which would do a great deal of injury to bee-keeping. However, he paid a visit to Dzierzon, and hav-

ing convinced himself of the correctness of the method of the latter, he became a warm supporter of Dzierzon's theory, which had hitherto been strongly opposed by him; he, indeed, became the most zealous advocate of the hive with movable combs; and his letters on apiculture, which appeared in the *Eichstadt Bienenzeitung*, and which silenced Dzierzon's opponents, largely contributed to the success of the new system. That Von Berlepsch carried out a great many valuable investigations in regard to the economy of bees, and that he is the inventor of the frames, and of the so-called Berlepsch hive and the pavilions, are well-known facts.

In 1858 he parted with his Seebach estate and gave up bee-keeping, but he continued to take a deep interest in bees up to the time of his death. From Coburg he removed to Munich, where he died on Aug. 17, 1877.

Von Berlepsch is the author of a large work on bees, entitled, "Bees and bee-keeping in districts poor in melliferous plants, considered from the present state of the theory and practice of apiculture;" the first edition of which appeared in 1860. This book is very beautifully written, and quite fascinated the readers at the time. Of course it is no longer in accordance with the requirements of the present time, still it contains much of lasting value and of deep interest to all thoughtful bee-keepers. Braunschweig, Germany.

For the American Bee Journal.

Taxing Colonies of Bees.

W. J. ROBERTS.

A very self-satisfied correspondent in noting an article or two on the above subject, says: "Now the way is to find out if such property is taxable, and that can only be done by inquiring of the ablest and most learned in the law, and not those who have a mere surface knowledge of it." And then the next issue (June 28), as though the whole bee-keeping fraternity had asked him, as that ablest and learned man, the question, he informs the world that they are not taxable, without a special law to that effect. Saying that they are not taxable without a special law, is nothing more than saying they are not taxable unless they are taxed.

The Supreme Court of the United States, in *Nathan vs. Louisiana*, 8 How. 73, held that "the taxing power of a State is one of its attributes of sovereignty, and where there has been no compact with the Federal Government, nor cession of jurisdiction for the purposes specified in the constitution, this power reaches all the property and business in the States." That power is exercised by legislation, designating the property to be taxed, and authorizing some agent of the State to levy and collect the tax. Until the power is exercised, it is as though the power did not exist.

It is silly to say there must be special legislation in the case of bees.

All that is necessary is some legislation. In each State in the Union, all property therein is covered by the general legislation on taxation. Such property as the legislature has decided shall be taxed is designated in one way or another. All other property is expressly or by necessary implication exempt.

All that any bee-keeper has to do to determine whether his bees are taxable property is to consult the statute law of his State. Accordingly as he shall find bees included or excluded in the enumeration of personal property to be taxed, will the question be determined. There is no occasion for consulting "the ablest and most learned in the law" of the bee-keepers of this country.

Keokuk, O., Iowa, July 29, 1886.

[We think that quite enough has been said on the subject of taxation, and we now ask our correspondents to desist, at least for the present. The one who asked the question which started this discussion ought to be quite satisfied by this time.—ED.]

For the American Bee Journal.

Honey-Dew on Wheat.

J. O. SHEARMAN, (100—135.)

One of my neighbors reported to me that my bees were working in swarms on his wheat, in the time of basswood flow, which was from July 6 to the 16th here, this year. Then after the wheat was cut the bees worked on the stubble. Do any of the fraternity know of a case similar? The bees would fly up in swarms ahead of him as he walked through the field (they did not offer to sting). The honey-dew was so thick all over the wheat while he was binding that it stuck to his hands and clothes like gum. No aphides or plant-lice were present, but the wheat was a poor crop, not well filled. Some patches a rod or two across would not have a handful of grain, although the straw was of good growth—the outcome of the drouth, as we had no rain worth mentioning for six weeks previously, and very warm days with a few cool nights at the time of the honey-dew. I did not hear of it until it was past, or would have gone to the spot to investigate it more particularly, but my neighbor is a responsible man, and I was busy at the end of that flow, basswood coming at the same time.

I did not find any honey of a spurious nature or bad taste in the combs from which we extracted a few days afterwards; it all tasted like basswood and clover mixed.

That was a mile or more east of us, and at the same date 1½ miles west, another neighbor reported that bees were at work for several mornings (from 7 to 9 o'clock mostly) on a walnut tree so plentifully that he thought there was a swarm alighting there, and going near by to see, noticed that

the leaves of the tree looked "shiny and gummy," and the bees were on every leaf and twig. No plant-lice were noticeable. How is that?

White clover and alsike yielded well here, but shortened up a little by the drouth. Basswood was short and sweet, but not a very heavy flow. Goldenrod may yield some now that rain has come plentifully, for the first time in seven weeks.

New Richmond, 9 Mich.

Read at the Indiana State Convention.

Winter Protection of Bees.

EVA SCHOLL.

There is perhaps nothing connected with the care of bees that has been the cause of so much anxiety, study and thought by bee-keepers as wintering; and, well it may, when official statistics show, that of 78,526 colonies in this State in the fall of 1882, 29,842, or more than one-third, were dead by April 1, 1883. Nor have we fared any worse than a number of other States, in proportion to the number of colonies kept. Such facts and figures show that with all our knowledge in other branches of business, successful wintering of bees is an art yet to be learned by many bee-keepers.

While there is uniformity in many things in the management of bees, when it comes to wintering, the plans and methods given are so many, and so various, as almost to distract the beginner. Uniform success will probably never be attained; nor is it possible for all to adopt the same plan. Let us then first consider what a colony needs protection against.

The food of the bee being liquid, nearly all is exhaled in the form of moisture. This passes off in moderate weather, but in cold it is condensed on the comb and sides of the hive in the form of frost. To prevent the accumulation of frost near the cluster, it is necessary to provide means for warmth as well as dryness. With the brood-nest contracted, and a good absorbent above the bees, we have, perhaps, the best known way to secure this; something that will retain the natural warmth of the cluster and allow the moisture to escape.

The principal points embodied in the plan of wintering here given, were suggested some twelve years ago by our esteemed friend, Mr. J. S. Hill, of Mt. Healthy, Ohio, and after ten years of uniform good success, I see no necessity of any essential change.

The hive I use is the 10-frame Langstroth, having double walls and bottom, with an open space between. This I consider of prime importance; not only as a winter hive, but also as a protection against heat in summer, as such hives need no shade, the air-space around the brood-chamber preventing all danger of comb melting down. The extra bottom with dead-air space is a safe-guard against moisture from the ground. The extra work required on such hives need not cost over 75 cents each, and does not add perceptibly to their size. As a

10-frame hive is too large for safe wintering, division-boards are used. These are made of two pieces of $\frac{1}{4}$ -inch lumber, with air-space between. Division-boards do not reach the bottom of the hive by $\frac{1}{4}$ inch. Eight frames give sufficient space for the strongest colonies. When chaff division-boards are used, there is room for only six or seven frames. Every brood comb has two half-inch tin tubes through it for winter passages. Five or six sticks, half-inch square, are placed across the frames, and a woolen blanket lined with muslin is then put on. The blanket should fit so closely all around that not a bee can get above it. A stretcher made of burlap tacked on a light frame, that drops loosely into the upper box, and rests on four short nails a half inch from the lower edge of the box, allows the box to be lifted off when filled with packing.

My experience is that dry beech leaves make the best packing. The box should not be more than $\frac{3}{4}$ full. Chaff is inclined to retain moisture. A little ventilation over the packing is necessary to allow the escape of moisture constantly arising from the bees. This is secured by slightly raising the cover. The entrance is tightly closed with a long block having a small notch about $\frac{1}{4}$ inch square, cut in the under side. Four inches above this entrance is an inch hole, so protected with a slide as to prevent a direct draft into the hive. Sleet and ice cannot close this upper entrance. Straw or refuse hay is packed under the hive at the first approach of cold weather; and a portable fence $4\frac{1}{2}$ feet high is erected for a wind-break.

It is very important that all preparations for winter be made early, before the weather becomes too cool for bees to fly. Bees are very sensitive to the first cold, and it is very injurious to disturb them by any manipulations or feeding after they have entered dormancy, or their natural period of rest.

Lyons' Station, O. Ind.

Boone and Hendricks Co. Convention.

The joint association of bee-keepers of Boone and Hendricks Counties, Ind., met at the residence of Mr. James Catterson, of Hendricks county on June 16, and was organized by electing Ora Knowlton, of Boone, President; Nathaniel Gossett, of Hendricks, and W. H. Higgins, of Boone county, Vice-Presidents; and John Lingerian, of Hendricks county, Secretary. After some preliminary business the association adjourned to dinner, which consisted of a bountiful supply of the good things that the ladies of this association know how to prepare, and the society is much indebted to the efforts of Mr. and Mrs. Catterson in making the meeting both useful and pleasant. The first business after dinner was to select the place for the next meeting, which will be held at Elie Smith's,

Boone county, near Fayette, on the third Thursday of September next.

Mr. Catterson's bee-house was one of the attractions of the meeting.

The members took a lively part in the discussions, and Miss Martha Cox read a paper on "The Honey Bee." The President gave an address on the general features of bee-keeping. We had with us Mr. Mason, of Putnam county, who was full of information, and I. N. Cotton, of Marion county, President of the State Association, who gave us some of his stock of mirth and wit. The meeting was not only useful but lively, often indulging in applause. The social part of the meeting was more than pleasant.

JOHN LINGERMAN, Sec.

ORA KNOWLTON, Pres.

For the American Bee Journal.

My First Colony of Bees, etc.

W. M. BARNUM.

When I was a boy of 16 or 17 years, a friend offered me a colony of bees in an old-fashioned box-hive, if I would come and get them. Being glad of the chance, I accepted his offer, and told him that I would be after them the next morning. On the morrow, bright and early, taking one of the men with me, we started with the two-horse wagon. Arriving at Mr. W's we found nobody astir, so we went into the apiary of perhaps 15 to 20 colonies, and picking out the heaviest hive, we covered it with an old carpet and carried it to the wagon. The roads at that time of the year were in a terrible condition, so we drove over into Mr. W's meadow, which extended almost half way to our place, and arrived home all right.

Taking a large round fence-post we drove it into the ground (a few rods back of the house), and sawing it off about 2 feet above the ground, we securely nailed a board to it, which was perhaps 5 or 6 inches wider than the hive. Putting the hive upon this, I imagined that my "trials and tribulations were over;" but no, I soon found to my regret that they had but just begun. Rolling a log up within a few feet of the hive, I sat down to watch those "blessed bees." I had not been seated five minutes before I came to the conclusion that they were short of stores and needed a little help. I had arisen, and perhaps taken three or four steps towards the house, when a bee lit on my left ear. That bee died very suddenly, and if it had not been that that colony was a present, etc., there might have "sunthin" happened to "that." But I gave them some sugar syrup, and called up a lot of robber bees, and in my attempt to rescue the dish of syrup, I got stung again. Along towards night it commenced to snow, and the next morning the number of dead bees around that hive was astonishing.

I did not get over a pound of surplus honey that year, and only one swarm; two went to the woods. I often laugh as I think of those days,

and how proud I was of my first colony. But now, how changed! Since the advent of the movable-frame hives bee-keeping has taken a wonderful step forward, and is to-day one of the most promising industries mankind has yet discovered.

I think that any one of Mr. Doolittle's articles is worth many times the price of the BEE JOURNAL. I wish that he would give his plan of wintering bees.

I notice on page 474, Mr. M. L. Spencer's reference to my query concerning ants in the hives (Query, No. 279). He says: "Our common kerosene oil, the kind burned in lamps, will kill them, eggs and all." Yes, I do not doubt it at all, and I should think it would kill the bees too. I find Mr. G. W. Demaree's remedy quite effective, viz: wet salt. I tried it the day I received the paper, and to-day there is not an ant to be seen. I was surprised at Prof. Cook's answer, i. e., "I find it easy to dislodge them by simply brushing them off." I had tried that several times before sending my query, but somehow they would always be there when I afterwards examined the hives.

Angelica, 9 N. Y.

Read at the Maine Convention.

Label all your Honey.

LYMAN F. ABBOTT.

There are important points of consideration constantly arising in practical apiculture. The question of honey-production in Maine or New England, is no longer one of doubt, and that to a profitable degree. As the business has become better understood, and bee-keepers have been willing to devote the study, time and care that this somewhat peculiar business demands, to make it a success, honey-production has been fairly remunerative. The highest success in any branch of industry as measured by the present standard, is only attained by the application of strictly business principles and thorough knowledge of all the facts and relations bearing upon that particular branch of productive industry.

In the matter of honey-production the Maine bee-keepers, as well, in fact, as the producers of honey in any part of the country, have some adverse influences to contend with. Before the management of bees and the adaptation of implements suited to the best manner of manipulating the hive and the production of honey were so well known as now, what honey was produced found ready sales at good prices, and the supply was never half adequate to the demand. Those days, however, have passed. In common with all branches of industry, apiculture has made wonderful strides in the way of improvements in all features connected with the business.

While good progress has been made in the matter of producing the products of the hive, there have been influences at work, modifying to some extent the relation of production of

hive products to the market. We have fallen upon an age of adulteration. It is surprising and alarming to contemplate the extent the adulteration of foods has assumed. Not only that, but in the case of honey the most absurd statements have been invented, and these circulated from one end of the country to the other. This has created a prejudice and mistrust in the minds of the reading public regarding the purity and genuineness even of comb honey.

We have reasons for saying that Maine honey, like most of her productions, excels in the market. The only trouble is that we do not produce enough of it. It is safe to say that the past season where we produced one ton of honey, two tons could as well have been harvested, had the requisite number of colonies of bees been on hand to gather it.

This matter of selling pure honey will soon stand on a firm foundation, if bee-keepers take the right course. The time is not far away when the man who will not label his goods so as to equivocally declare their honest contents, will beg for a market.

Honey, like butter, must be sold on its merits. We are educating the public up to nice distinctions in the matter of domestic articles. It is but a few years, comparatively, since one man's butter discriminated in the matter of price over another's dairy. The same was true with honey, and largely that is the case now. But the educated bee-keeper knows, and a discriminating public is beginning to find it out, that all honey is not the same in taste, color, texture and purity. It is safe to say each apiary in Maine may, as a general rule, make at least three qualities of extracted honey during the season.

As I have intimated, bee-keepers should put their names upon every package of honey sent to the retailer, in a plain, conspicuous manner, so as to carry conviction that the contents of the package are just what it promises to be—a pure product of the beehive. In this way prejudice will be overcome, and faith in the honest bee-keeper be established.

Lewiston, 9 Maine.

OUR CLUBBING LIST.

We supply the *American Bee Journal* one year, and any of the following publications, at the prices quoted in the last column of figures. The first column gives the regular price of both. All postage prepaid.

	Price of both.	Club
The American Bee Journal	1 00..	
and Gleanings in Bee-Culture.....	2 00..	1 75
Bee-Keepers' Magazine.....	2 00..	1 75
Bee-Keepers' Guide.....	1 50..	1 40
The Apiculturist	2 00..	1 75
Canadian Bee Journal.....	2 00..	1 75
Texas Bee Journal.....	2 00..	1 75
The 7 above-named papers	6 50..	5 50
and Cook's Manual.....	2 25..	2 00
Bees and Honey (Newman).....	2 00..	1 75
Binder for Am. Bee Journal.....	1 75..	1 60
Dzierzon's Bee-Book (cloth).....	3 00..	2 00
Root's A B C of Bee-Culture.....	2 25..	2 10
Farmer's Account Book.....	4 00..	3 00
Guide and Hand-Book.....	1 50..	1 30
Heddon's book, "Success,"	1 50..	1 40

Local Convention Directory.

1886.	Time and place of Meeting.
Aug. 31.—Stark County, at Canton, O.	Mark Thomson, Sec., Canton, O.
Sept. 4.—Sheboygan Co., at Sheboygan Falls, Wis.	Mattie B. Thomas Sec., Sheboygan Falls, Wis.
Oct. 7.—Wis. Lake Shore Center, at Kiel, Wis.	Ferd Zastrow, Sec., Milwaukee, Wis.
Oct. 12-14.—North American, at Indianapolis, Ind.	F. L. Dougherty, Sec., Indianapolis, Ind.
Oct. 19, 20.—Illinois Central, at Mt. Sterling, Ill.	J. M. Hambaugh, Sec., Spring, Ill.
Dec. 1, 2.—Michigan State, at Ypsilanti, Mich.	H. D. Cutting, Sec., Clinton, Mich.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

SELECTIONS FROM OUR LETTER BOX

Bee-Killers.—Wm. H. Smith, Centreville, O. Ind., writes:

I send some insects that kill bees by the hundreds when they gather honey from my sweet clover. I have not seen them any place else. They catch them and suck the honey out of the bees. What are they?

[These insects are *Asilus Missouriensis*, commonly called bee-killers. They are very destructive enemies of the bees, quick on the wing, and not easily captured. We have a collection of over 100 different kinds of these bee-killers in our Museum.—ED.]

No Swarms and No Honey.—M. W. Shepherd, Rochester, 3 O., on July 29, 1886, says:

I can record a total failure in bee-keeping here this season. We have had no swarms and have obtained no honey. Basswood and white clover never looked more prosperous, but failed to secrete nectar. Some colonies have not as much honey in the hives as they had the last of May. Nuclei have to be fed to keep them from starving.

Cause of Paralyzed Bees.—F. J. McConoughey, Hilliard, 9 Mich., on July 30, 1886, writes:

Seeing in the BEE JOURNAL of July 14 a query in regard to paralyzed bees, I thought that perhaps I might throw a little light on the subject. The description of those bees' actions exactly tallies with the actions of bees poisoned by working on *Digitalis*—the "foxglove" of our flower-gardens. Some years ago I saw some beautiful specimens of foxglove a few miles away from here, and of course must have some in my flower-garden. We got them, and in due time they blossomed, but they never got the chance to do so again, in our yard. The bees do not always get home to die, some of them dying

before they can get out of the flower. If there is *Digitalis* growing in flower-gardens in the neighborhood of the querist, I dare say that he will find, if he watches, that his bees have visited them.

One of the Goldenrods.—Fred F. Rockwell, Leonard & Texas, on July 29, 1886, writes:

I enclose a small sprig of a flower that bees are fairly "booming" on just now. It is very thick on a large grass farm near us. Will you kindly give me the name of it?

[It is one of the many goldenrods (*Solidago*), exquisite in appearance, and excellent for honey.—Ed.]

Season in Southern New York.—J. H. Andre, Lockwood, & N. Y., on July 30, 1886, says:

The honey harvest this season began the earliest in Southern New York of any year since 1865, and continued good until July 1, when the extreme hot weather shut off all resources by which the bees could obtain honey; since that time they have barely made a living. In fact, one colony which I had made by division, and given the old queen with but little honey and two frames of brood, I fed for fear they could not gather enough to take care of the brood. I suppose some are looking forward for a good yield of surplus from buckwheat, etc. Now I hope they will not be disappointed, but I sum it up in this way all through this poor honey yield: The colonies, with the exception of a few of the strongest, are weak, containing only about half as many bees as they should at this season of the year, and if we get a few weeks of good honey weather, which I think we will, as everything is favorable now, the first thing the bees will do will be to build up in numbers, and that will take nearly all of the honey gathered. Add to this an early frost (and we are almost certain of one this season, as when the chestnuts blossom late we always get an early frost), and the outlook is not favorable. I do not doubt but what many June swarms will not gather enough for winter stores, especially if hived without foundation. I have already begun to build up the few weak colonies I have, as I think it is far better to do it now and know it is well done, than wait until late in the fall and do it then.

Teasel Honey.—C. A. Camp, Painesville, & O., writes:

In regard to Mr. Doolittle and teasel honey, I would say that it is not proposed to give it up in this manner. Now I assert that not one apiarist in one hundred knows that Mr. D. has "from 4 to 6 weeks" of honey-flow from teasel. When he makes the statement of 135 pounds of comb honey per colony, as he does in his circular, without stating that it came in part from teasel, it is certainly misleading.

It must be remembered that Mr. D.'s articles are sometimes copied into agricultural papers, and are read by those who are not apiarists, and when such yields of honey are stated without mentioning the source, it induces many to embark in the business, and only half-yields of honey can be the result. The whole truth should be told. On page 458 the editor stated that in 1877 the "Thurber Gold Medal" was awarded to Mr. D. on teasel honey, and the bee-papers made the fact known "at the time." Why, Mr. Editor, do you not know that within nine years thousands of apiarists have been made, and many, very many, have been born since 1877? and I fail to see how it could have remained anything except a profound "secret" to all these people, and I shall do the best possible to let the cat out.

[This "secret" business and "letting the cat out" is perfect nonsense. Those who were made apiarists or born since 1877 are not the complainants now. We have requested Mr. Doolittle to tell all he knows about Teasel as a honey-producer, and his article will be published next week.—Ed.]

Shipping Bees.—A. Carder, Varna, & N. Y., asks the following:

1. What kind of a car is the best to ship bees in, a grain or a stock car? I want to ship about Sept. 10. 2. Will wire-cloth over the top of the hives give bees enough ventilation when shipping them?

1. A grain car is best; an open car would admit too much soot and dust. Pack them so that the frames are parallel with the track.

2. Remove the cover, and put three strips across the frames over the wire-cloth for ventilation. If the hives have porticos, nail wire-cloth over them, leaving the entrance from the frames to the portico open.—Ed.]

Severe Drouth.—D. J. Myers, Republican, & O., on July 26, 1886, writes:

We had a splendid season for bees in this locality until July 10, but the continual drouth throughout July scorched all the white clover. We have had three heavy honey harvests, fruit-bloom, white clover and bass-wood. These are our honey-producing flowers. Bees are now beginning to work on corn-tassel blossoms and pumpkin blossoms. I put out on the summer stands 21 colonies: increased to 36, sold 6, and have 30 left. I expect 1,000 pounds of comb honey. I took off from one hive June 29, 80 pounds, and expect 40 more. Extracted honey is of very slow sale in our market. Comb honey is selling from 10 to 13 cents per pound. We do not expect much fall honey, as we had no rain for six weeks to do any good.

Bee-Bunglers.—C. W. Dayton, Bradford, & Iowa, on Aug. 2, 1886, writes:

I might say, as the general report goes, that everything is drying up, so there is no prospect for a fall crop. Fire will run through the grass in the pastures. We have had the greatest drouth ever known here. I think the bees get a little honey-dew, which may be beneficial, by cleaning out some of the "one-horse bee-bunglers" who rush their honey into the market early, all at once, and at any price, much to the disgust of the skilled and posted apiarist.

Honey Crop Almost a Failure.—H. R. Boardman, East Townsend, & O., on Aug. 2, 1886, writes:

This has been the poorest season for honey in this locality ever known. The season opened unusually promising, but a severe drouth and cool nights ruined the surplus yield. The brood-chambers are unusually heavy. In several of my apiaries surplus is a total failure. I have hundreds of colonies that have not gathered a pound of surplus honey, or had any increase. I am very sure that the early reports have given a false estimate of the honey crop in the country. I think it will be found to be very poor, and in many places a total failure. A little honey-dew has made its appearance in some places, but not sufficient as yet to do any harm.

An Absconding Swarm.—Lawrence Beale, Cassadaga, & N. Y., writes:

On June 16 a swarm issued while I was away, and left for parts unknown; but strange to say on the next day they came back and settled on a hive that had a colony in it. I looked them over, and found they were queenless. The colony they issued from did not swarm again.

Fall Honey Bloom a Failure.—J. N. Arnold, Richmond, & Iowa, on Aug. 2, 1886, writes:

Bees wintered very successfully in this locality last winter. I had 25 colonies on the summer stands in the Quinby hive; they increased to 50 colonies, and got 4,000 pounds of extracted honey from white clover and linden. I do not think there will be much fall honey; it is very dry. We have not had a good rain for ten weeks.

Are Bees Animals?—J. O. Shearman, New Richmond, & Mich., on July 26, 1886, writes:

Mine are taxed in this way: I report to the supervisor so many second-hand hives worth, say \$1 each on an average, with one bee in each over six months old worth from 50 cents up to \$3 (but few \$3 ones); average, say \$1.50. Last spring he put them all at \$2 each, as all property of that kind was low. I do not want to shirk responsibility as a tax payer, and my

principal business is in the bee-line. The Michigan law states expressly that no animal less than six months old shall be taxed, or rather all over six months shall, and all my bees but the queen are less than six months old. Are bees animals? Well, they are not vegetable or mineral. Are chickens animals? And are they taxable?

Drouth Broken.—C. P. Dow, Covington, Neb., on Aug. 2, 1886, writes:

I have about 180 colonies of bees. We have no white clover here, and so depend wholly on wild forage for our honey, such as willow, box-elder, sweet-elder, sumac, goldenrod, etc.; the latter is our main dependence, as it yields bountifully, if not nipped by frost. Our drouth of over 45 days is at last broken by frequent showers, and I expect to see an abundant yield from goldenrod, although my bees have done remarkably well so far. I have taken off a good quantity of as fine a quality of honey as can be found in Sioux City, white clover not excepted.

Peculiar Season.—Wilber G. Fish, Ithaca, N. Y., on Aug. 2, 1886, writes:

The season here has been a peculiar one. White clover bloomed very profusely, but the drouth was so severe that no honey was secreted, and apiaries depending solely upon that for early honey, have no surplus. Alsike yielded sparingly; I have extracted an average of 25 pounds per colony from it, and bees are now working upon its second bloom. Basswood is an entire failure. The late rains have brought on buckwheat, and the indications are favorable for a good yield from it.

Not Much Basswood Honey, etc.—S. S. Sleeper, Holland, N. Y., writes:

The honey crop in this county is light. There is no basswood honey compared with what we generally have; only about one-third of a crop. The AMERICAN BEE JOURNAL is a welcome messenger every week. I could not think of keeping bees without it. What an inestimable benefit it has been to the bee-keepers of America. It has placed apiculture in this country on a firm basis, so that it can be relied upon as a pursuit.

Unwise Bee-Keepers.—A. W. Fisk, Bushnell, Ills., on Aug. 2, 1886, writes:

Bees in this locality that were properly managed did remarkably well the forepart of the season, and honey was abundant. Some bee-keepers sold their honey too soon and flooded our Bushnell market—some selling as low as 5 cents per pound for extracted, and 10 cents a pound for nice comb honey. I think this is doing themselves a wrong, and damaging to the bee-business. But it has been very dry for the last four or five weeks, and

bees are doing nothing, and the price of honey is advancing, for there is no show for a fall honey crop unless we have heavy rains immediately.

The Chapman Honey-Plant.—T. F. Bingham, Abronia, Mich., on Aug. 2, 1886, says:

I send you a half-open head of the Chapman honey-plant. It is a wonderful attraction to the bees. My plants have one or more bees on every open head from morn till dark. Their hum is constant among my fifty plants. I have never seen a plant half so frequented before.

Hunting Bees in the Woods.—F. H. Webster, Lynn, Mass., on Aug. 2, 1886, writes to us asking for information concerning the capture of bees in the woods. Several others have asked for similar information, and as we have had no experience in that line, we will let Mr. F. M. Johnson, an experienced bee-hunter, give his methods as follows:

You require a small box, which can be made of any kind of wood. The box is of a slanting shape, and should be made according to the following dimensions: Bottom, 4x6 inches; sides, 4 inches at one end, beveled down to 1½ inches at the other; end pieces, one, 4x4 inches, the other 1½ deep by 4 inches long. The top should be a separate piece, and made as follows: Width, 4 inches, whole length 12 inches; cutting down 4 inches on end for handle, and inserting a glass 3x1 inches, flush with the under side at the other end, as near the end as convenient.

The box should contain a piece of honey comb about 1½ inches in thickness, which should be scented with bee-bait (the directions for making this are given below), covering the bottom of the box. Taking the box in the left hand, and the cover in the right, and approaching the bee while at work on the flower or shrub, you insert the box under the bee, and quickly putting the cover on the top (in such a manner that the light can shine in), you have the bee secure in the box; then put the box on a stake 3 or 4 feet high, taking care not to jar the box more than necessary. Then shove the cover down so as to shut out the light from the glass, when the bee will go to work on the honey, which can be ascertained by holding the ear to the box, as it will cease its "humming" as soon as it commences on the comb. Then the cover can be taken off and the bee will remain on the honey. Then take a position where you can have an unobstructed view of the box and its surroundings, and wait for the bee to come out, which it will do in from one to three minutes, and commence circling in the air, gradually enlarging the circles until it finds its latitude, at which it will immediately start in a direct line for its home, and here care must be taken to accurately mark the direc-

tion it goes. You must now wait for a short time, when the bee will return and re-enter the box, which it will repeat as long as the box remains. If the tree should be near by, the other bees will accompany it on its second or third return; if at a great distance it will take a longer period for the bees to "double up."

If you have gotten 15 or 20 bees at work on the line you can safely take the box to a point as far distant, in the course the bee has taken, as you choose, being careful not to pass where the bee is likely to tree, as they will not follow the other way. Now, open the box again, and if you are on the line the bees will find it in a very few minutes. If they do not you will know that you are off the line, or have passed the tree, and should move your box to a point that you know is on the line. This is to be repeated until you run the bee to its tree.

If you have but a few bees it will be necessary to shut them in the box and move them in this manner from 30 to 60 rods at a time, then open your box and wait for them to go and return. This is to be repeated until you have found the tree.

Cross lining is important. If anything should prevent you from following the bee in a direct line from where you first start it, you can move the box a distance to the right or left and start it again, by which means you can centre the bee on some prominent object, whereby you can invariably locate the tree within a radius of 5 or 6 rods.

Half an ounce of tincture of annis mixed with a half dozen drops of oil of organum, to be kept in an air-tight bottle.

Instead of using honey in your box, put a quantity of granulated sugar in a bottle and dissolve it with cold water until it becomes a thick syrup, and fill the comb in the box with this liquid, which is better than the real honey.

[A pair of climbers is quite necessary when climbing trees, and a rope tied around the waist with which to draw up the desired tools. The limb or tree should be cut off above the hollow containing the bees, and allowed to fall. Then tie a stout rope about the log hive, pass it over a limb above, cut the hive off and lower it to the ground. Let it there remain an hour or so, or until sun-down, when the bees will have found and entered the hive again. Then cover the entrance with wire cloth, take it away, and then transfer the bees in the usual way to a frame hive.—ED.]

Convention Notices.

The Cortland Union Bee-Keepers' Association will hold a basket picnic at Little York, N. Y., on Wednesday, Aug. 18, 1886. All interested in bee-culture, with their families, are cordially invited to attend and have a good time.
D. T. SHATTUCK, Sec., Homer, N. Y.

The next meeting of the Stark County Bee-Keepers' Society will be held in Grange Hall, at Canton, O., on Aug. 31, 1886. M. THOMSON, Sec.



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 PROPRIETORS,
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 At One Dollar a Year.

ALFRED H. NEWMAN,
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Special Notices.

To Correspondents.—It would save us much trouble, if all would be particular to give their P. O. address and name, when writing to this office. We have several letters (some inclosing money) that have no name; many others having no Post-Office, County or State. Also, if you live near one post-office and get your mail at another, be sure to give the address we have on our list.

Dr. Miller's Book, "A Year Among the Bees," and the BEE JOURNAL for one year, we will club for \$1.50.

A New Crate to hold one dozen one-pound sections of honey.—It has a strip of glass on each side, to allow the honey to be seen. It is a light and attractive package. As it holds



but one tier of sections, no damage from the drippings from an upper tier can occur. We can furnish the material, ready to nail, for 9 cts. per crate. Glass 1½c. per light, extra.

Bees for Sale.—We offer to sell a few strong colonies of Italian bees. In ten-frame Simplicity hives, at \$6.00 each.

Red Labels for one-pound pails of honey, size 3x4½ inches.—We have just gotten up a lot of these Labels, and can supply them at the following prices: 100 for \$1.00; 250 for \$1.50; 500 for \$2.00; 1,000 for \$3.00; all with name and address of apiarist printed on them—by mail, postpaid.

Italian Queens.—We have a few untested queens which we can send by return mail. Three for \$2.75; six for \$5.00; twelve for \$9.00. For Tested, double the prices.

Yucca Brushes are employed for removing bees from the combs. They are a soft, vegetable fiber, and do not irritate the bees. As each separate fiber extends the whole length of the handle as well as the brush, they are almost indestructible.



When they become sticky with honey, they can be washed, and when dry, are as good as ever. The low price at which they are sold, enables any bee-keeper to have six or more of them, so as to always have one handy. We can supply them at 5 cents each, or 50 cents a dozen; if sent by mail, add 1 cent each for postage.

Simmins' Non-Swarming System is the title of a new English bee-book. The author claims that it will inaugurate a "new era in modern bee-keeping," and states that "it is based upon purely natural principles, and is the only system that can ever be relied upon, because no other condition exists in the economy of the hive that can be applied to bring about the desired result—a total absence of any desire to swarm." It contains 64 pages; is well printed and illustrated. Price 50 cents. It can now be obtained at this office.

When Renewing your subscription please try to get your neighbor who keeps bees to join with you in taking the BEE JOURNAL. It is now so cheap that no one can afford to do without it. We will present a **Binder** for the BEE JOURNAL to any one sending us four subscriptions—with \$4.00—direct to this office. It will pay any one to devote a few hours, to get subscribers.

The Western World Guide and Hand-Book of Useful Information, contains the greatest amount of useful information ever put together in such a cheap form. The printing, paper, and binding are excellent, and the book is well worth a dollar. To any one sending us two new subscribers besides their own, with \$3, for one year, we will present a copy of this valuable book.

The Convention History of America and the AMERICAN BEE JOURNAL for one year, will be clubbed for \$1.15.

To any One sending us one new subscriber with their own renewal (with \$2.00), we will present a copy of the new "Convention History of America."

Sample Copies of the BEE JOURNAL will be sent FREE upon application. Any one intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office, or we will send them all to the agent.

Frank Cheshire's new book on Bees and Bee-Keeping, can be had at this office.—Vol. I, bound in cloth, \$2.50, postpaid.

Honey and Beeswax Market.

Office of the AMERICAN BEE JOURNAL,
 Monday, 7 a. m., Aug. 9, 1886.

The following are the latest quotations for honey and beeswax received up to this hour:

CHICAGO.

HONEY.—Prices are nominal. Offers of 13½c. would be accepted; yet 14c. is being asked.
BEESWAX.—Source at 25c.
 R. A. BURNETT, 161 South Water St.

NEW YORK.

HONEY.—The present quotations are as follows: Fancy white comb in 1-lb. sections, 10½c.; fancy white comb in 2-lb. sections, 9½c.; buckwheat in 1 and 2-lb. sections, 5½c.; extracted white clover, 6c.; extracted, California, 4½c.; extracted, Southern, per gallon, 45 to 55c.
BEESWAX.—23 to 25c.
 McCaul & Hildreth Bros., 34 Hudson St.

BOSTON.

HONEY.—One-lb. sections, white clover, 13½c.; 2-pound sections, 11½c. Extracted, 6½c.
BEESWAX.—25 cts. per lb.
 Blake & Ripley, 57 Chatham Street.

DETROIT.

HONEY.—The market is a little dull, fruit interfering with the demand. Best comb honey in 1-lb. sections, 13c.
BEESWAX.—Firm at 23c. for fair quality.
 M. H. HUNT, Bell Branch, Mich.

CINCINNATI.

HONEY.—The demand for extracted honey has been very light of late, but it seems to be improving gradually for manufacturing purposes. There is considerable honey in the hands of commission merchants, and prices are very low—3¼ to 7 cts. per pound is the range of prices. Prices of comb honey are nominal.
BEESWAX.—Arrivals are good and the demand fair. We pay 18½c. for fair to choice yellow.
 C. F. MUTH & SON, Freeman & Central Ave.

CLEVELAND.

HONEY.—Within the last two weeks honey has not sold so readily, owing to the near approach of the new crop and the uncertainty of the new prices. B. B. white, 1-lb. old honey moves slowly at 14 cts.; no demand for 2-lbs. Extracted, 6½c.
BEESWAX.—22 to 25c.
 A. C. KENDLER, 115 Ontario Street.

KANSAS CITY.

HONEY.—The receipts of new comb honey are fair, with a good demand, and light stock in the city. Extracted is in light demand. We quote: ½-lb. sections, 10c.; white clover, 1-lb. 13½c.; dark, 1-lb., 10½c.; white clover, 2-lbs., 11½c.; dark, 2-lbs., 9½c.; white sage California, 2-lbs., 10½c.; dark, 2-lbs., 8½c.; extracted white clover, 5½c.; dark, 3½c.; white sage California, 4½c.; dark, 3½c.
BEESWAX.—22½c.
 CLEMONS, CLOON & Co., cor. 4th & Walnut.

MILWAUKEE.

HONEY.—The market is fairly supplied with honey, trade is dull, prices depressed, and the outlook is for a large production. Already some is being peddled about the city by the producers themselves, demoralizing the prices, which should not be done. We quote: Choice white in 1-pound sections, 14½c.; 2-lbs., 13½c. Dark honey not wanted. Extracted, white, in barrels and kegs, 5½c.; in tin cans, 6½c.; dark in barrels or kegs, 4½c.
BEESWAX.—25c.
 A. V. BISHOP, 142 W. Water St.

SAN FRANCISCO.

HONEY.—Arrivals of honey have been smaller in the last week, as the prices are so low that producers or owners cannot afford to sell without a loss to them, and they prefer, therefore, to store their honey either here or in the country for better prices. The crop has been represented much larger than it really is; and prices are improving a little, or are at least a little firmer. Some large sales at 3½ to 4c. for choicest quality for export have been made. We quote 3½ to 4½c. the latter for choicest quality in a jobbing way. Supplies are very small, but soon they may increase, and quality promises to be choice.
BEESWAX.—According to quality, 20 to 23c.
 SCHACHT & LEMCKE, 122-124 Davis St.

HONEY.—Prices are so low that honey-producers are holding back their product; still the market is well supplied. We quote: Comb, extra white, 8½c.; off grades, 6½c.; extracted, white, 4½c.; amber, 3½c.; dark, 3c.
BEESWAX.—22½c.
 O. B. SMITH & Co., 423 Front Street.

ST. LOUIS.

HONEY.—Choice comb, 10½ to 12½c.; latter price is for choice white clover. Strained, in barrels, 3½c. Extra fancy of bright color and in No. 1 packages, ¼ advance on above prices. Extracted in barrels, 4½c.; in cans 6½c.
BEESWAX.—Firm at 22c. for prime.
 D. G. TUTT & CO., Commercial St.

System and Success.

All who intend to be systematic in their work in the apianry, should get a copy of the Apianry Register and commence to use it. The prices are reduced, as follows:

For 50 colonies (120 pages) \$1 00
 " 100 colonies (220 pages) 1 25
 " 200 colonies (420 pages) 1 50

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable.

The St. Joseph, Mo. Inter-State Bee-Keepers' Association will hold its annual meeting on Wednesday evening of the Exposition week, September 30, 1888. Arrangements are being made to have an interesting meeting. The place of holding the meeting will be published in our local papers on Tuesday and Wednesday a.m.

H. T. ABBOTT, Sec.

The Illinois Central Bee-Keepers' Association will hold its next meeting at Mt. Sterling, Ills., on Tuesday and Wednesday, Oct. 19-20, 1888. J. M. HAMBAUGH, Sec.

The next annual meeting of the Michigan State Bee-Keepers' Association will be held in Ipsanti, Mich., on Dec. 1 and 2, 1888.

H. D. CUTTING, Sec.

Advertisements.

Will sell 400 full Colonies of Bees in lots to suit buyer; or will sell Apiaries already stocked up. Now is your time.

Address, H. R. BOARDMAN, 28Atf EA. TOWNSEND, Huron Co., O.

Metal Reversible Frame Corners.

ACKNOWLEDGED by all to be the best. A can be made to fit any frame if exact width of frame is given when ordered. Strong and simple to adjust.

Sample Corners, for 1 frame 5 cts.; for 10, 35 cts.; for 25, 75 cts. All Corners made 1/2-inch unless otherwise ordered. F. M. JOHNSON, WASHINGTON DEPOT, Litchfield Co., CONN. 32Atf

ATTENTION, BEE-KEEPERS!!

NOW is the time to Italianize Cheap. Having all my orders filled to date, will sell Fine Queens from my well-known Strains, at the following very low rates: 1 Queen, 80 cts.; 6 Queens, \$4.50; 12 Queens, \$8.00; 1 Tested Queen, \$1.50; 6 Tested, \$8; 1 Select Tested Queen, \$2.00. Safe arrival of all Queens guaranteed, and Queens sent by return mail. Address, Wm. W. CARH, 32Atf COLERAINE, MASS.

HONEY and BEES for SALE.

5,000 POUNDS of HONEY, White Clover and Basswood, in 1-pound Sections. Also, 100 COLONIES of Bees in good hives; good straight combs, strong with bees and heavy with honey—at \$6.00 per Colony. WILLIAM BLAKE, 32A3t BUCHANAN, Berrien Co., MICH.

WANTED!

500,000 Names.

EVERY Poultry, Bee or Pet Stock Breeder subscribing for "THE POULTER" during the next 90 days—and sending us a list of not less than twenty-five (25) bona fide names and addresses of persons who are or may be interested in POULTRY (so that we may send them Sample Copies)—will have his or her name inserted in our "Breeder's Directory," FREE OF CHARGE. To the Breeder sending the largest list of names will be presented a one inch advertisement in "THE POULTER" for Six Months; to the second largest list, for Four Months; to the third largest list, for Two Months; and to the fourth largest list, for One Month, free of charge. This gives every breeder (who subscribes) a Free "ad" in our Breeder's Columns. "THE POULTER" one year and a chance for a one inch "ad" free—ALL FOR 50 CENTS. Address, THE POULTER, MT. VERNON, OHIO.

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We make the finest Honey-Sections in the World and make no exceptions. G. M. Doolittle says: "The last sections are just complete." James Heddon—"They excel everything in the line of perfect workmanship." Prof. N. W. McLain—"The sections excel anything I have seen heretofore." J. B. Mason—"Have received samples from all manufacturers who advertise in the bee-papers. I must say this is by far the nicest section I have ever seen." Jno. L. Janeway—"They seem perfect itself so far as human workmanship can go." Sample for 2-cent stamp. Price-List of Sections, Hives, Syrio-Albino Queens and Bees, and other Apianry Supplies, free.

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BEE Hives and Sections—Send to HERE & BEULE, manufacturers, Beaver Dam, Wis., for price lists. Good materials. Low prices. 10A26t

TESTED Queens, (Imported Mother), \$1.25 each; \$12 per doz.—O. N. Baldwin, Clarksville, Mo. 4A1y

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FINE Tested Italian Queens of this year's breeding, for \$1 each; Untested Queens only 65 cts. each, by return mail. Hives and Sections at rock-bottom prices. B. J. MILLER & CO., Nappanee, Ind. 29Atf

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WARRANTED Queens 75 cts. each; per dozen, \$8.00. All Queens sent out prior to Aug. 10 will be reared from cells built by natural swarming. Queens shipped next day after receiving order, if so desired. Should any prove to have mislabeled, they will be replaced with a nice Tested Queen of 1886 rearing. Address,

JAMES WOOD, North Prescott, Mass. 20A20t

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high side-walls, 4 to 16 square feet to the pound. Circular and samples free. J. VAN DEUSEN & SONS, Sole Manufacturers, Sprout Brook, Mont. Co., N. Y.

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We pay 20c. per lb., delivered here, for yellow Beeswax. To avoid mistakes, the shipper's name should always be on each package.

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Large, Handsome and Extra-Prolific Queens

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HUMPHREYS' HOMEOPATHIC SPECIFIC No. 28

In use 30 years. The only successful remedy for Nervous Debility, Vital Weakness, and Prostration, from over-work or other causes. \$1 per vial, or 5 vials and large vial powder, for \$5. SOLD BY DRUGGISTS, or sent postpaid on receipt of price.—Humphreys' Medicine Co., 109 Fulton St., N. Y.

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Italian and Carniolan Queens

BY RETURN MAIL.

BRED in separate apiaries away from other bees. Warranted Italian or untested Carniolan Queens, in June, \$1.10; 6, \$5.00; in July, \$1; 6, \$5. State which you prefer, Bellinzona or Golden Italians. For full particulars and prices of Bees, send for Circular. Satisfaction guaranteed.

CHAS. D. DUVAL, 24Et4 SPENCERVILLE, Mont. Co., MD.

ITALIAN QUEENS.

I WILL furnish Warranted Italian Queen-Bees for \$1.00 each; Tested Queens for \$2.00 each. Delivered by mail.

PETER BRICKEY, Lawrenceburg, Ky. 18E10t

W. Z. HUTCHINSON,

Is rearing Italian Queens for sale again this season, and can furnish them, by mail, safe arrival guaranteed, as follows: Single Queen, \$1.00; 6 Queens for \$5.00; 12, or more, 75 cts. each. Tested Queens \$2.00 each. Make Money Orders payable at Flint. Send for price-list of Bees (fall colonies or by the pound), Given Foundation, Hives, Cases, Feeders, White Poplar Sections, etc., etc.

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1-lb., all-in-one-piece, 40c per lb. for heavy. Y-Groove, \$4 per 1,000 50c " " light. Less for lots of 10,000 Send for Samples and Price-List.

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My 18 Annual Price-List of Italian, Cyprian Queens and Nuclei Colonies (a specialty); also Supplies—will be sent to all who send their names and addresses.

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